

REMARKS

In accordance with the foregoing claims 5, 10, 15, and 20 have been amended. Claims 22 and 23 has been added. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-21 are pending and under consideration.

REJECTION UNDER 35 U.S.C. §102:

In the Office Action, at page 2, item 2, the Examiner rejected claims 1-21 under 35 U.S.C. §102(e) as being anticipated by Takashima (U.S. Patent No. 6,787,941 - hereinafter Takashima). The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicants traverse this rejection and respectfully request reconsideration.

On pages 2-3 of the Office Action, the Examiner asserts that Takashima shows an actuator of a hard disk drive in figures 8-9. Takashima shows a projection 17 alleged to be the "connection mold" that contacts only the holding member 11 alleged to be the "inner mold" (see Figs. 9 & 10). On page 3, the Examiner identified a dotted area on the outside of the coils in fig. 8 & 9 as the outer mold. Figure 10 is cross-sectional view of Fig. 9. In Figure 10, the alleged "outer mold" is the same part as holding member 11 as the thin/thick stripes of the cross section show. That is, the alleged inner mold 11 is the same piece as the alleged outer mold. In this context, something is missing, either the inner or outer mold. Therefore, Takashima fails to teach or suggest "a connection mold connecting the outer mold and the inner mold." Further, in the present invention, the connection mold 149c connects the outer mold 149a and the inner mold 149b so as to increase a coupling force between the coil 156 and the inner mold 149b (pg. 8, paragraph 32). Paragraphs 32 and 33 state:

More particularly, the plastic resin injected in the plastic resin injection molding to couple the coil 156 to the rear end portion of the arm 146 is contracted while being cooled. Here, as the outer mold 149a is contracted, the coupling force between the coil 156 and the outer mold 149a increases. Since the inner mold 149b is connected to the outer mold 149a through the connection mold 149c, as the connection mold 149c is contracted, the inner mold 149b is pulled toward the non-effective portion N of the coil 156. Thus, the non-effective portion N of the coil 156 is completely encompassed by the outer mold 149a, the inner mold 149b, and the connection mold 149c in a closely contacting state.

As described above, since the coupling force between the inner mold 149b and the coil 156 is increased by the connection mold 149c, the conventional problem that the inner mold 149b and the coil 156 are separated by vibrations or impacts can be solved.

Takashima shows a projection 17 and/or holding member 11 that is inside the effective portion of the coil, which is in contrast to the present invention where the connection mold is formed as "part of a surface of a non-effective portion." Therefore, Takashima will not reduce vibrations as will the present invention. Thus, Takashima does not provide the desired increased coupling force between the arm and the coil of the actuator because it does not teach or suggest a connection mold for connecting the outer mold with the inner mold where the vibrations are separated from the inner mold and the coil.

In the paragraph bridging pages 3-4 of the Office Action, the Examiner asserts that Takashima discloses claim 6. As stated above, Takashima fails to teach or suggest "a connection mold connecting the outer mold and the inner mold." Therefore, Takashima does not teach or suggest claim 6.

The Examiner asserts that Takashima shows the features of claims 2-5, 7-10, 12-15, and 17-20. As discussed above, Takashima fails to disclose the elements of independent claims 1, 6, 11, 16, and 21. Moreover, dependent claims 2-5, 7-10, 12-15, and 17-20 recite patentably distinguishing features of their own. For example, claim 7 recites "a connection mold connecting the outer mold and the inner mold is formed at least part of a surface of a non-effective portion of the coil." Takashima fails to teach or suggest "a connection mold connecting the outer mold and the inner mold." Takashima shows a projection 17 in figures 8-10 that is formed on a surface of the effective portion of the coil. Takashima shows the holding member 11 surrounding the coil 7 (Fig. 10). Takashima describes, "projection 17 for securing the coil 7 is integrally disposed beforehand at the end of the carriage 8, and the projection 17 and the coil 7 are secured by means of a holding member made up of thermoplastic resin" (col. 1, lines 34-38). Because the connection mold in the present invention is between the inner and outer mold and across the coil, the coupling force between the coil and the outer mold and the coupling force between the coil and the inner mold is increased by the connection mold formed on the surface of the non effective portion of the coil (paragraph 39). Thus, Takashima does not teach or suggest recite "a connection mold connecting the outer mold and the inner mold is formed at least part of a surface of a non-effective portion of the coil."

ALLOWABLE SUBJECT MATTER

The Examiner previously indicated in the June 17, 2005 non-final Office Action that claims 5, 10, 15 and 20 are objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 5, 10, 15 and 20 are rewritten in independent form. Because claims 1-20 contain allowable subject matter, it is submitted that the claims are in condition for allowance. An early action to that effect is courteously solicited.

NEW CLAIMS 22 & 23

New claim 22 recites that the features of the present invention include "An actuator assembly of a hard disk drive, comprising: an arm, comprising: a voice coil, an outer mold holding the voice coil on an outside; an inner mold holding the voice coil on an inside; and a connection mold connecting the inner mold and the outer mold across the coil." Dependent new claim 23 recites that the features of the present invention include "the connection mold is located on the side away from the pivot." Nothing in the prior art teaches or suggests such. It is submitted that the new claims, which are different and not narrower than prior filed claims distinguishes over the prior art.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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